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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,001	02/14/2001	Jurgen Kockmann	P00.1887	5861
29177	7590	07/13/2004		
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			EXAMINER CHANG, EDITH M	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 07/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/720,001

Applicant(s)

KOCKMANN ET AL.

Examiner

Edith M Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the figure 1, the numeral 1 needs label “fix station”; the numeral 4 needs label “RF module”; the numeral 20 needs label “carrier frequency sequence unit”. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 2 is objected to because of the following informalities:

Claim 2, the term “a” in the limitation “in addresses a through N of the table” is not clear

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that it is a definite article or a symbol represents a number.

Claim 5, the term "k" in the limitation "a part j of k possible carrier frequency" lacks antecedence. It suggests changing "A method according to claim 1" to "A method according to claim 2" where "k" is defined.

Claim 11, the term "k" in the limitation "a part j of k possible carrier frequency" lacks antecedence. It suggests changing "A method according to claim 7" to "A method according to claim 8" where "k" is defined.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partyka (US 6058137).

Regarding **claims 1 & 7**, Partyka discloses a method and the apparatus (FIG.4) for transmission of information in various carrier frequencies with a frequency hopping method, comprising a means (FIG.3a is the sequence generator) for offering a random sequence of a plurality of N possible carrier frequency values f_x in addresses 1 through N of a table (FIG.3b the frequency matrix is the table N is 128 here), whereby the N possible carrier frequency values are arranged in n sub-groups (each row is the sub-group, column 9 lines 23-27 wherein the row is

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the sub-group); a means for periodically repeated readout at least a part M of the N carrier frequency values sequentially from the table (8 FIG.1 is the mean, column 4 line 55-column 5 line 5 wherein the subgroup M frequencies are readout until all frequencies are used, the process is repeated), wherein each sub-group being sequentially read out from the corresponding addresses (column 8 lines 55-65 wherein each sub-group being sequentially read out from the corresponding addresses, all frequencies of each sub-group are sequentially read out from the corresponding addresses) and the sub-groups being read out in a discontinuous sequence (column 9 lines 15-18, wherein the sub-groups is selected by a pseudo random sequence), $M \leq N$ applies; and transmitting information in the corresponding carrier frequencies.

Regarding **claims 2 & 8**, Partyka discloses generating a respective random sequence of plurality k of possible different carrier frequency values f_x for each sub-group (FIG.3a is the generating means, column 8 lines 55-65 wherein the k is the elements the row contains); and obvious writing the random sequence of the k carrier values f_x into the corresponding addresses of the respective sub-group of the table as shown in FIG.1 that the table is implemented in 20 data memory of the control logic 8 of FIG.1.

Regarding **claims 3-4 & 9-10**, Partyka discloses setting up a connection/implementing synchronization including sampling a carrier frequency (100 FIG.2) deciding whether a specific message was received on the carrier frequency during a specific time span (130 FIG.2, column 11 lines 23-35); when the deciding step is negative, selecting a new carrier frequency and sampling the new carrier frequency; when the deciding step is positive, editing the table upon employment of the message (column 11 lines 59-66, column 12 lines 7-18, wherein the deciding is positive when the synchronization is obtained, if is negative selecting a new carrier, 138

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FIG.2). Partyka teaches a frequency hopping system receiving the transmitted hopping signal shown in FIG.2 (FIG.1, FIG.2, & FIG.4, column 11 line 22-column 12 line 18), and obviously provide steps as recited in the claim.

Allowable Subject Matter

5. Claims 5 and 11 are objected to informality, but would be allowable if rewritten to overcome the objections.
6. Claims 6, and 12 are objected as being dependent upon objected base claims, but would be allowable if the objected base claims overcome the objections.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 703-305-3416. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edith Chang
July 8, 2004


CHIEH M. FAN
PRIMARY EXAMINER